Table WEB-2: Summary of Diisodecyl phthalate (DIDP) Developmental Toxicity Studies

				Effects	
Strain	**Experimental Regimen**	**Number**	**Dose (mg DIDP/kg bw/day)**	**Maternal**	**Fetal**
Wistar Rat	Prenatal developmental toxicity study.	10	0		
Hellwig et al. et al. 1997	DIDP administered in oil by gavage on gd 6-15.	8	40		NOAEL.
	Dams weighed on gd 0, 6, 10, 15, and 20 and sacrificed on gd 20**.**	7	200	NOAEL.	↑Fetuses/litter with variations (38 vs 24%).
	Maternal uteri were weighed, corpora lutea were counted and implantation sites examined. Fetuses were weighed and examined for gross external malformations. Half the fetuses were examined for visceral malformations and the other half for skeletal malformations.	10	1000	↑Kidney and liver to body weight ratios. Vaginal hemorrhage in 3 dams.	↑Fetuses/litter with variations (44 vs 24%). ↑Cervical ribs (15 fetuses in 6 litters vs 1 fetuses). ↑14^{th} ribs (21 fetuses in 8 litters vs 1 fetus).

Table WEB-1: Summary of Diisodecyl phthalate (DIDP) Developmental Toxicity Studies

				Effects	
Strain	**Experimental Regimen**	**Number**	**Dose (mg DIDP/kg bw/day)**	**Maternal**	**Fetal**
Sprague-Dawley Rat Waterman et al. et al. 1999	Prenatal developmental toxicity study. DIDP administered in oil by gavage on gd 6-15. Sacrificed on gd 21. Dams weighed on gd 0, 6, 9, 12, 15, 18, and 21.	25 22 24	0 100 500	NOAEL.	No Effects. ↑ % Fetuses with cervical ribs (6.2 vs 1%). ↑ % Fetuses with lumbar ribs (21.2 vs 8.2%).
	Maternal uterus and ovaries were weighed, corpora lutea were counted and implantation sites examined. Fetuses were weighed, sexed, and examined for gross external malformations. Half of fetuses were examined for visceral malformations and the other half for skeletal malformations.	24	1000	↓ Weight gain (Transient). ↓ Food Intake (Transient).	↑ % Litters with cervical ribs (41.7 vs 8%). ↑ % Litters with lumbar ribs (95.8 vs 40%). ↑ % Fetuses with cervical ribs (9.2 vs 1.0%). ↑Fetuses with lumbar ribs (52 vs 8.2%).

Table WEB-3: Summary of Di-isodecyl phthalate (DIDP) Reproductive Toxicity Studies

Strain	Experimental Regimen	Number/ Sex	Dose* (mg /kg bw/day)	Effects	
				Parental**	**Offspring****
Crl:CDBR, VAF Plus Rats (Exxon Biomedical Sciences 1997)	Two generation reproductive toxicity study. DIDP administered in feed for 10 weeks prior to mating at levels of 0, 0.2, 0.4, and 0.8%. Males treated through mating period and females through gestation and lactation. Body weight and food intake was measured weekly. Estrous cycles were evaluated. F_0 dams were killed at the end of lactation and males were killed following birth of last litter. Reproductive and other key organs were examined histologically. Primordial oocytes were counted in females and sperm was evaluated in males. Details of the second generation breeding experiment are listed on the next page.	40 30 30 40	0 103-198 / 127-203 / 131-149 / 172-361 211-405 / 253-416 / 262-287 / 359-734 427-781 / 508-775 / 524-551/641-1582	↓Normal sperm in F_0 (<1.4%). ↑Liver hypertrophy in F_0. ↑Kidney to body weight ratio in F_0 males. ↓Normal sperm in F_0 (<1.4%). ↑Epididymis to body weight ratio in F_0. ↑Liver to body weight ratio with hypertrophy in F_0. ↑Kidney to body weight ratio in F_0. ↑Stomach lesions in F_0 females. No effects on F_0 mating, fertility, fecundity, and gestational indices, no reproductive organ lesions, and no effect on oocyte or sperm counts at any dose. ↓Normal sperm in F_0 (<1.4%). ↓Estrous cycle length in F_0. ↓Ovary to body weight ratio in F_0. ↑ Epididymis and testes to body weight ratio in F_0. ↓Weight gain in F_0 during lactation. ↑Liver to body weight ratio with hypertrophy in F_0. ↑Kidney to body weight ratio in F_0 with histological changes in males. ↑Stomach lesions and thymus atrophy in F_0 females.	↑Liver to body weight ratio (F) ↑Hypertrophy in F_1. Delayed vaginal opening in F_1 (33.5 vs 32.2 days). ↓F_1 pup birthweight. ↓F_1 pup survival at birth and postnatal day 4. ↑Liver to body weight ratio with hypertrophy in F_1. Delayed vaginal opening in F_1 (34.2 vs 32.2 days).

*Doses for: Males during premating / females during premating / females during gestational period / females during lactational period.
** Parental effects are discussed under Section 4 and offspring effects under Section 3

Table WEB-3 (Continued): Summary of Di-isodecyl phthalate (DIDP) Reproductive Toxicity Studies

Strain	Experimental Regimen	Number/ Sex	Dose* (mg /kg bw/day)	Effects	
				Parental **	Offspring**
Crl:CDBR, VAF Plus Rats (Exxon Biomedical Sciences 1997)	Sexual maturation was monitored in F_1 pups selected for second generation breeding. Upon weaning the pups were fed diets with the same DIDP concentrations as parental rats.	30	0		
		30	117-216 / 135-218 / 135-152 / 162-379	↑Liver to body weight ratio (F) ↑Hypertrophy in F_1. ↑Kidney to body weight ratio in F_1 (M).	↓F_2 pup survival on postnatal days 1 and 4.
	The same parameters examined in the F_0 rats were examined in the F_1 rats.	30	229-437 / 273-433 / 262-297 / 334-761	↑Epididymis and seminal vesicles to body weight ratio in F_1. ↑Liver to body weight ratio in F_1 with hypertrophy. ↑Kidney to body weight ratio in F_1.	↓F_2 pup survival postnatal days 1 and 4. ↑Liver hypertrophy in F_2 pups.
		30	494-929/ 566-927 / 574-611 / 637-1424	No effects on F_1 mating, fertility, fecundity, and gestational indices, no reproductive organ lesions, and no effect on oocyte or sperm counts at any dose. ↑Epididymis, seminal vesicle, and testes to body weight ratio in F_1. ↓Weight gain in F_1 during lactation. ↑Liver to body weight ratio with hypertrophy in F_1. ↑Kidney to body weight ratio in F_1 with histological changes in males. ↑Thymus atrophy in F_1 females.	↓F_2 pup birthweight. ↓F_2 pup survival on postnatal days 1, 4, 7 and at weaning. Undescended testes in 4 pups. ↑Liver hypertrophy in F_2 pups.

*Doses for: Males during premating / females during premating / females during gestational period / females during lactational period.
** Parental effects are discussed under Section 4 and offspring effects under Section 3

Table WEB-4: Summary of Di-isodecyl phthalate (DIDP) Reproductive Toxicity Studies

Strain	Experimental Regimen	Number/ Sex	Dose* (mg /kg bw/day)	Effects	
				Parental**	Offspring**
Crl:CDBR, VAF Plus Rats	Two-generation reproductive toxicity study.	30	0		
(ExxonMobile Biomedical Sciences 2000)	DIDP administered in feed for 10 weeks prior to mating at levels of 0, 0.02, 0.06, 0.2, and 0.4%.	30	12-23 / 14-21/ 13-15 / 19-37	No effects	No effects
	Males treated through mating period and females through gestation and lactation.	30	33-68 / 40-58 / 39-43 / 57-112	No effects	No effects
	Body weight and food intake were measured weekly.	30	114-225 / 139-202 / 127-147 / 178-377	No effects	No effects
	F_0 dams were killed and necropsied at the end of lactation and males were killed and necropsied after mating. Pups were examined for survival and sexual maturation. One pup/sex/litter was necropsied at pnd 21. Histological examinations were not conducted.	30	233-453 / 274-406 / 254-295 / 356-744	↑Liver and kidney to body weight ratio. No effects on mating, fertility, fecundity, and gestational indices at any dose.	No effects on survival, body weight gain, organ weights, anogenital distance, nipple retention, preputial separation, vaginal opening, or malformations.
	Details of the second generation breeding experiment are listed on the next page.				

*Doses for: Males during premating / females during premating / females during gestational period / females during lactational period.
** Parental effects are discussed under Section 4 and offspring effects under Section 3

Table WEB-4 (Continued): Summary of Di-isodecyl phthalate (DIDP) Reproductive Toxicity Studies

Strain	Experimental Regimen	Number/ Sex	Dose* (mg /kg bw/day)	Effects	
				Parental **	Offspring**
Crl:CDBR, VAF Plus Rats (ExxonMobile Biomedical Sciences 2000)	Upon weaning the pups were fed diets with the same DIDP concentrations as parental rats. The remaining details are as described for the 1st generation.	30	0		
		30	32 / 32 / 11-26 / 14-25 / 13-15 / 19-40	No effects.	No effects.
		30	94 / 95/ 33-76 / 41-77 / 38-44 / 52-114	No effects.	No effects.
		30	313 / 313 / 114-254 / 137-266 / 134-151 / 166-352	↑Kidney to body weight ratio in (M). ↑Liver to body weight ratio (F).	↓Pup survival on postnatal days 1 and 4. ↓ Pup body weight on pnd 14 (F) and pnd 35(M).
		30	635 / 645 / 235-516 / 271-524 / 256-286 / 356-747	↑Kidney to body weight ratio (M). ↑Liver to body weight ratio. No effects on mating, fertility, fecundity, and gestational indices at any dose.	↓Pup survival postnatal days 1 and 4. ↓ Pup body weight on pnd 14 , pnd 21 (F), pnd 28 (M) and pnd 35(M). ↑Liver to body weight ratio (F). ↑Age of preputial separation (+1.2 days). No effects on anogenital distance, nipple retention, vaginal opening, or malformations.

*Doses for: Males during first two weeks post weaning / females during first two weeks post weaning / males during premating / females during premating / females during gestational period / females during lactational period.
** Parental effects are discussed under Section 4 and offspring effects under Section 3